No.



200200034

### THER UNIVERD STRATES OF AMERICAN

TO ALL TO WHOM THESE PRESENTS SHALL COME;

# Asgrob Seed Company LIC

MUCCONS, THERE HAS BEEN PRESENTED TO THE

#### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE ITTLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITIORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, & CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN DUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY RECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'SN79553'

In Testiment Marrest, I have hereunto set my hand and caused the seal of the Hant Harista Huntertian Office to be affixed at the City of Washington, D.C. this twenty fourth day of June, in the year two thousand three.

Allert

Bem Jhe

Commissioner Plant Variety Protection Office Agricultural Marketing Service Mayerro cy of Agriculture

REPRODUCE LOCALLY. Include form number and date on all reproductions		FORM APPROVED - OMB NO. 0581-00		
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse)	The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a)  Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).			
NAME OF APPLICANT(S) (as it is to appear on the Certificate)  Asgrow Seed Company LLC	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER WPG2683B	3. VARIETY NAME SN79553		
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)	5. TELEPHONE (include area code) 515-232-7170	FOR OFFICIAL USE ONLY  2002 0 0 0 3 4		
634 E. LincolnWay Ames, IA 50010	6. FAX (include area code) 515-232-6905	F DATE 12/5/2001		
7. GENUS AND SPECIES NAME Glycine max (L.) Merr.	8. FAMILY NAME (Botanical)  Leguminosae	FILING AND EXAMINATION FEE  B S 2, 405, 00		
9. CROP KIND NAME (Common Name) Soybean		DATE 12/5/2001		
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation Name)  Corporation	CERTIFICATION FEE			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION  Delaware	December 22, 1997	DATE / 103		
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APP  Donald Steffen 634 E Lincoln Way  Ames, IA 50010	14. TELEPHONE (include area code) 515-956-3002  FAX (include area code) 515-232-6905			
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on rever  a. Exhibit A. Origin and Breeding History of the Variety  b. Exhibit B. Statement of Distinctness  c. Exhibit C. Objective Description of the Variety  d. Exhibit D. Additional Description of the Variety  e. Exhibit E. Statement of the Basis of the Applicant's Ownership  f. Voucher Sample (2,600 viable untreated seeds or, for tuber propagated varieties verification that ti  g. Filing and Examination Fee (\$2,705), made payable to "Treasurer of the United States" (Mail to P	issue culture will be deposited and maintained in	a public reposition)		
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAMED YES (if "yes," answer items 18 and 19 below)	E ONLY, AS A CLASS OF CERTIFIED SEED	? (See Section 83(a) of the Plant Variety Protection Act)		
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?  \[ \sum_{YES} \sum_{NO} \] \[ \sum_{NO} \]	SSES OF PRODUCTION BEYOND BREEDER ERED			
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED,  ☐YES (if "yes," give names of countries and dates)  ☐ NO  USA — December 11, 2000	OFFERED FOR SALE, OR MARKETED IN 1	THE U.S. OR OTHER COUNTRY?		
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant varientitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penaltic.	e duration of the certificate. riety, and believe(s) that the variety is new, disti			
SIGNATURE OF APPLICANT (Owner(s))	SIGNATURE OF APPLICANT (Owner(s)	)		
NAME (Please print or type)  Donald Steffen	NAME (Please print or type)			
CAPACITY OR TITLE  Manager, IP & Regulatory Affairs  11/30/2601	CAPACITY OR TITLE	DATE		

### ASGROW SEED COMPANY LLC PVP APPLICATION - SN79553

#### **EXHIBIT A**

#### ORIGIN AND BREEDING HISTORY

- 1993 Final cross was made at Isabela, Puerto Rico.
  - Parentage: A2833/4/A2722/3/A2835//A3237\*3/40-3-2
- 1993 F1 generation was grown at Isabela, Puerto Rico and advanced using modified single seed descent.
- 1993 F2 generation was grown at Isabela, Puerto Rico and advanced using modified single seed descent.
- 1994 F3 bulk populations were grown at Janesville, Wisconsin and single plants pulled.
- 1995 F3 derived F4 plants were grown at Janesville, Wisconsin in PRYT rows and variety SN79553 was selected based on yield.
- 1996 F3:5 breeder seed was grown for progeny row increase and at 3 locations in Wisconsin.
- 1997 F6 seed was grown in yield tests at 10 locations in the midwestern U.S..
- 1998 F7 seed was grown in yield tests at 26 locations thoughout the U.S.
- 1999 F8 seed was grown in yield tests at 30 locations thoughout the U.S.

Variety SN79553 is uniform and stable within commercially acceptable limits based on trial observations since 1996. As with any other soybean variety, variants can occur for almost any characteristic during the course of repeated sexual reproduction.

### ASGROW SEED COMPANY LLC PVP APPLICATION - SN79553

#### **EXHIBIT B**

#### **NOVELTY STATEMENT**

To our knowledge, the soybean varieties that closely resemble SN79553 are A2835, and AG2702:

<ol> <li>RR™ gene         (Tolerance to glyphosate herbicide)</li> </ol>	SN79553 A2835 AG2702	- Present - Absent - Absent Present Conformation reconciled  Par applicant's permission on 3/28/2002
2. Pubescence color	SN79553 A2835 AG2702	- Gray - Gray - Gray
3. Pod Wall color	SN79553 A2835 AG2702	- Brown - Brown - Tan

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705 EXHIBIT C (Soybean)

## OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max (L.) Merr.)

NAME OF APPLICANT(S) Asgrow Seed Company LLC				FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)				200200034
	634 E. LincolnWay Ames, IA 50010			VARIETY NAME SN79553
				TEMPORARY OR EXPERIMENTAL DESIGNATION QPG2683B
PLEASE READ ALL INSTR	UCTIONS CAREFULLY: Place the app	ropriate number that describ	es the varietal character of t	his variety in the boxes below.
Place a zero in the first box (e.	g. 099 or 09 ) when num	ber is either 99 or less or 9 or	less respectively. Data for o	quantitative
plant characters should be bas	sed on a minimum of 100 plants. Compa	rative data should be determ	ined from varieties entered i	in the same trial, Royal
Horticultural Society or any re	ecognized color standard may be used to	determine plant colors; desig	nate system used:	
Please answer all questions for	your variety; lack of response may dela	y progress of your applicatio	n.	
A. MORPHOLOGY				
Seed Shape:				
3 = Elong	$\Gamma$ , and $\Gamma$ /W ratios < 1.2)	(L/W) ratio $4 = Elongan$	cal-Flattened > 1.2; L/T ratio < te-Flattened > 1.2;T/W ratio >	
Seed Coat Color:				
1 = Yellov	w 2 = Green	3 = Brown	4 = Black	5 = Other (Please Specify)
Seed Coat Luster:				•
1 1 = Dull	2 = Shiny			
Seed Size:				
1 5 . 6 gr	rams/100 seeds			
Hilum Color:				
5 1 = Buff 6 = Black	2 = Yellow 7 = Other ( <i>Please</i>	3 = Brown e Specify)	4 = Gray	5 = Imperfect Black
Cotyledon Color:				
1 = Yellow	v 2 = Green			

#### A. MORPHOLOGY (Continued)

200200034

Seed Protein Peroxidase Activity:

1 = Low

2 = High

**Hypocotyl Color:** 

1 = Green'Evans' or 'Davis'

2 = Green with Bronze**Bands below Cotyledon** 'Woodworth' or 'Tracy'

3 = Light Purple below Cotyledons 'Beeson' or 'Pickett 71' 4 = Dark Purple extending to unifoliolate leaves ('Hodgson', 'Coker', or 'Hampton 266A')

Leaf Shape:

1 = Lanceolate

2 = Oval

3 = Ovate

4 = Other (Please Specify)

Flower Color:

1 = White

2 = Purple

3 = White with a Purple Throat

**Pod Color:** 

1 = Tan

2 = Brown

3 = Black

**Pubescence Color:** 

1 = Gray

2 = Brown (Tawny)

3 = Light Tawny

Plant Habit:

1 = Determinate

2 = Semi - Determinate

3 = Indeterminate

4 = Intermediate

**Maturity Group:** 

1 = 000

2 = 00

3 = 08 = V 4 = I

5 = II

 $6 = \mathbf{m}$ 11 = VIII 7 = IV12 = IX

13 = X

9 = VI14 = XI 10 = VII15 = XII

**Maturity Subgroup:** 

Please enter a value from 0 - 9

B. DISEASE REACTIONS

0 = Not Tested

1 = Susceptible

2 = Resistant

3 = Tolerant

**Bacterial** 

Bacterial Pustule (Xanthomonas campestris pv. glycines (Nakano) Dye)

Bacterial Blight (Pseudomonas syringae pv. glycinea (Coerper) Young, Dye, & Wilkie)

Wildfire Blight (Pseudomonas syringae pv. tabaci (Wolf & Foster) Young, Dye, & Wilkie)

**Fungal** 

Brown Spot (Septoria glycines Hemmi)

<b>B.</b> 1	DISEASE REACTIONS (Continued)	0 = Not Tested	1 = Susceptible	2 = Re <b>25000 2</b> = <b>6</b> obrant <b>3</b>
	Frogeye Leaf Spot (Cercospora so	jina Hara)		
	race 1	0 race 2	0 race 3	0 race 4
	race 5	0 race 6	Other	(Please Specify)
	Target Spot (Corynespora cassiica	ola (Berk. & Curt.) W	ei)	
	Downey Mildew (Peronospora trij	oliorum var. manchui	rica (Naum.) Syd. ex (	Säum)
0	Powdery Mildew (Microsphaera d	liffusa Cke. & Pk.)		
0	Brown Stem Rot (Phialophora gre	egata (Allington & Cha	umberlain) W. Gams.)	
0	Stem Canker (Diaporthe phaseolog	rum (Cke. & Ell.) Saco	c. var. <i>caulivora</i> Atho	w & Caldwell)
0	Pod and Stem Blight ( <i>Diaporthe p</i>	haseolorum (Cke. & E	II.) Sacc. var. <i>sojae</i> (I	ehman) Wehm.)
0	Purple Seed Stain (Cercospora kik	uchii (T. Matsu. & To	omoyasu) Gardener)	
0	Rhizoctonia Root Rot (Rhizoctonia	ı solani Kühn)		
Phyto	phthora Root Rot (Phytophthora meg	gasperma Drechs. f. sp	. glycinea (Kuan & Ei	win))
2	race 1 2 race 8	2 race 15	2 race 22	
2	race 2 2 race 9	1 race 16	2 race 23	
2	race 3 2 race 10	2 race 17	2 race 24	
2	race 4 2 race 11	2 race 18	1 race 25	
2	race 5 1 race 12	1 race 19	2 race 26	
2	race 6 2 race 13	1 race 20	0 Other (Please S	pecify):
2	race 7 2 race 14	2 race 21		
0	Bud Blight (Tobacco Ringspot Vir	us)		
0	Yellow Mosaic (Bean Yellow Mosa	ic Virus)		
0	Cowpea Mosaic (Cowpea Chlorotic	c Virus)		
0	Pod Mottle (Bean Pod Mottle Viru	s)		

B. DIS	SEASE REACTION	IS (C	ontinued)	$0 = N_0$	ot Tes	sted	1 = Susc	eptible	$2 = R\epsilon$	sistan	ŧ 3	= Tole	erant
0	Seed Mottle (Soyb	ean N	Aosaic Virus	s)					2 (	00	2 0	00	7. h
Nemato	ode										•		
Soybear	n Cyst Nematode (E	letero	odera glycine	s Ichinol	he)				2 (	0 (	2 0	00	3 4
0	race 1	0	race 4		0	race 9							
0	race 2	0	race 5		1	race 14	(former r	. 4)					
1	race 3	0	race 6			Other (A	Please Spe	cify)	<u></u>				
0	Lance Nematode (A	Hoplo	olaimus colu	mbus She	er)								
0	Southern Root Kno	ot Ne	matode ( <i>Me</i>	loidogyne	e incog	gnita (Ko	ofoid & W	hite) Chity	wood)				
0	Northern Root Kno	ot Ne	matode ( <i>Me</i>	loidogyne	e hapli	la Chitwo	od)						
0 Peanut Root Knot Nematode (Meloidogyne arenaria (Neal) Chitwood)													
0 Reniform Nematode (Rotylenchus reniformus Linwood & Olivera)													
0	Javanese Nematode	e (Me	loidogyne ja	vanica (T	(reub	) Chitwo	od)			ř			
	Other Nematode (I	`lease	Specify)				··						
C. PHY	SIOLOGICAL RE	SPO	NSES	$0 = N_0$	ot Test	ted	1 = Susce	ptible	2 = Re	sistant	3	= Tole	rant
0	Iron Chlorosis on C	Calcai	reous Soil										
0	Phosphorus												
0	Boron												
0	Aluminum												
0 5	Salt												
0 1	Drought												
	Other ( <i>Please Speci</i> j	fy)				····							

D. INSECT REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant 3 = Tolerant
0 Mexican Bean Beetle (Epilachna	varivestis Mulsant)		
0 Potato Leaf Hopper (Empoasca f	abae (Harris))		200200034
Other (Please Specify)			
E. HERBICIDE REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant
2 Metribuzin			
0 Bentazone			
1 Sulfonylurea			
2 Glyphosate		·	
1 Glufosinate			•
0 Pendimethalin			
Other (Please Specify)			
F. TRANSGENIC COMPOSITION  Has the development of the Subject Variet If yes, please complete the following inform 1. Please state the vector's name:  2. Please state the vector components:  3. Please describe the genetic material state. Please describe the insertion protocol:	mation requests*. Use	additional pages if n	ecessary.
* A literature citation(s) explaining the the "Transgenic Composition" portion	four information reque of this form.	ests above may be an	acceptable alternative to completion of
U.S. Patent No. 5,776,760. Issue Date: J Monsanto Company. Patent Application		: Barry, Gerard, and	l Kishore, Ganesh. Assignee:
ABSTRACT: Genes encoding a glyphosat transformed bacteria and plants which depherbicide.			

### 200200034 20020003

#### G. BIOCHEMICAL MARKERS

Please describe any biochemical information here which you believe will be helpful in further describing the Subject Variety (e.g. Simple Sequence Repeats, Restriction Fragment Length Polymorphisms, Isozymic Characterization). Use additional pages if necessary.

H. COMMENTS

ASGROW SEED COMPANY LLC PVP APPLICATION - SN79553

#### **EXHIBIT D**

#### ADDITIONAL DESCRIPTION OF INVENTION

SN79553 is a mid maturity group II variety with resistance to Roundup <sup>tm</sup> herbicide. It has very high yield potential. It has superior yields to lines of similar maturity and has excellent agronomic characteristics, including lodging resistance. It has a major gene for Phytophthora resistance, Rps1k, conferring resistance to most races of Phytophthora Root Rot. In tests, it has beaten DEKALB CX278RR by 121 % overall, winning at 26 of 30 locations. It is adapted to the mid maturity group II growing areas of Iowa, Illinois, Indiana, and Nebraska. It has above average appearance.

REPRODUCE LOCALLY. Include form number and edition date on all reproduct	tions.	FORM APPROVED - OMB No. 0581-0058			
U.S. DEPARTMENT OF AGRICULTURE		n accordance with the Privacy Act of			
AGRICULTURAL MARKETING SERVICE	1974 (5 U.S.C. 552a) and the Paper	Reduction Act (PRA) of 1995.			
EXHIBIT E	Application is required in order to de	termine if a plant variety protection			
STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held				
	confidential until the certificate is issi				
NAME OF APPLICANT(\$)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	1. VARIETY NAME			
Asgrow Seed Company LLC	WPG2683B	SN79553			
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)			
634 E. LincolnWay	515-232-7170	515-232-6905			
Ames, IA 50010					
	7. PVPO NUMBER	·			
	200	200034			
8. Does the applicant own all rights to the variety? Mark an "X" in the	ne appropriate block.				
If no, please explain.		YES X NO			
9. Is the applicant (individual or company) a U.S. National or a U.S.	based company?				
If no, give name of country		YES X NO			
10. Is the applicant the original owner?					
If no, please answer one of the following: .		YES X NO			
		<u></u>			
<ul> <li>a. If the original rights to variety were owned by individual(s), is</li> </ul>	(are) the original owner(s) a U.S. Nation	nal(s)?			
YES NO If no, give name of count	try				
b. If the original rights to variety were owned by a company(ies)	) is (are) the original owner(s) a U.S. ha	esed company?			
		soci company:			
YES NO If no, give name of count	try				
11. Additional explanation on ownership (If needed, use the reverse	for extra space):				
parameter property and the response	ror oxtra opadoj.				
Please Note:					
Plant variety protection can only be afforded to the owners (not licens	sees) who meet the following criteria:				
If the rights to the variety are owned by the original breeder, that pronational of a country which affords similar protection to nationals o	erson must be a U.S. national, national f the U.S. for the same genus and spec	of a UPOV member country, or ies.			
<ol><li>If the rights to the variety are owned by the company which employ nationals of a UPOV member country, or owned by nationals of a genus and species.</li></ol>	yed the original breeder(s), the compan country which affords similar protection	y must be U.S. based, owned by to nationals of the U.S. for the same			
3. If the applicant is an owner who is not the original owner, both the	original owner and the applicant must n	neet one of the above criteria.			
The original breeder/owner may be the individual or company who dir Act for definitions.	rected the final breeding. See Section 4	11(a)(2) ot the Plant Variety Protection			

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